



Linking spatial planning and energy – the SPECIAL project

**Dr Hugh Ellis, Head of Policy,
Town and Country Planning Association**

APSE Energy: Municipal Energy - Local Leaders Forum
De Montfort University, Leicester, Wednesday 29 October 2014

 @eu_special

 @theTCPA



Co-funded by the Intelligent Energy Europe
Programme of the European Union

Overview



- **Introduction to TCPA and SPECIAL**
- **Planning context – challenges and opportunities**
 - New policy context for planning and energy in England
 - Integrating energy and spatial planning
- **Lessons from Europe: best practice in spatial planning and energy – case studies**



Co-funded by the Intelligent Energy Europe
Programme of the European Union



Town & County Planning Association - Objectives



- Secure a **decent, well designed home for everyone**, in a human-scale environment combining the best features of town and country
- **Empower people and communities** to influence decisions that affect them
- Improve the planning system in accordance with the principles of **sustainable development**



Co-funded by the Intelligent Energy Europe Programme of the European Union

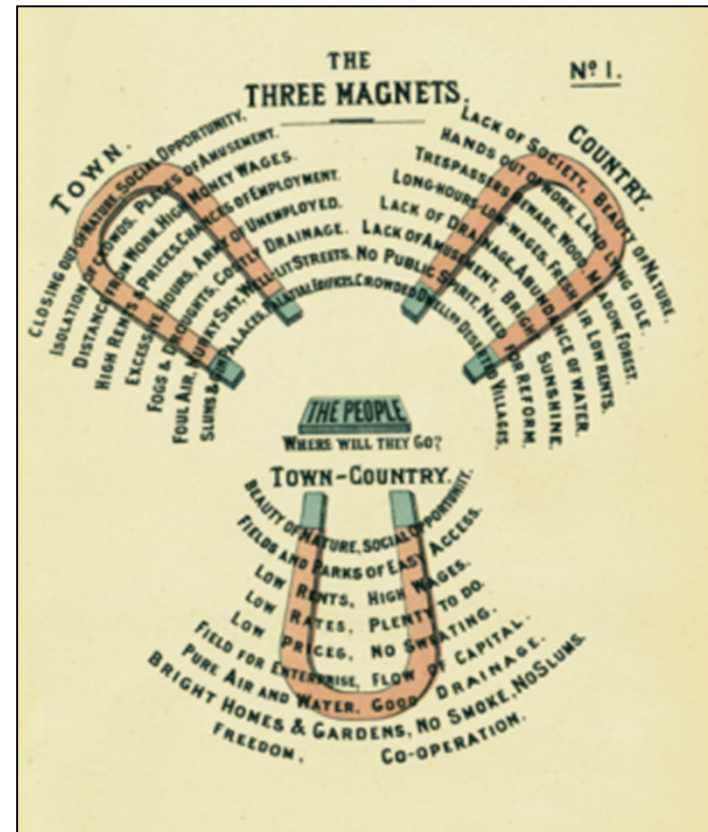
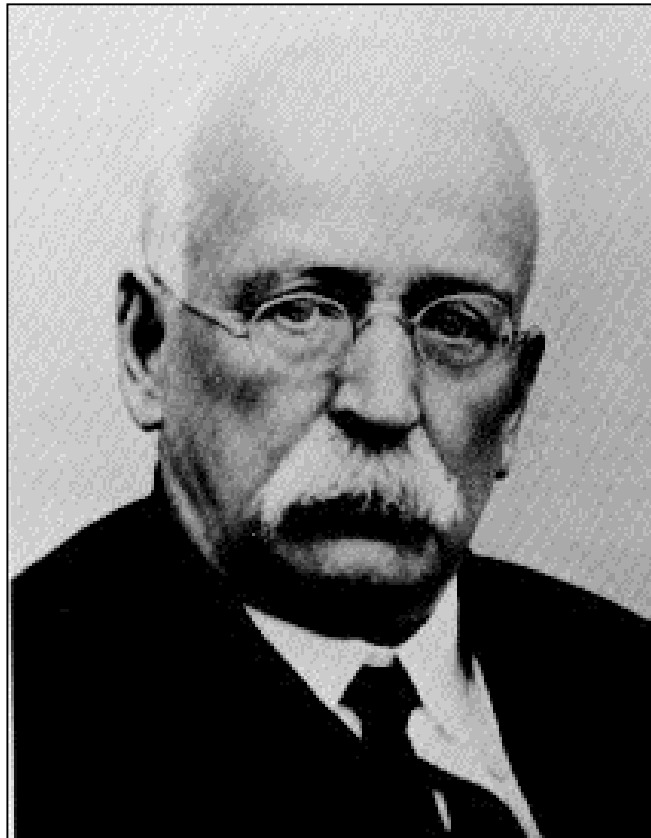


History



Founded as the **Garden Cities Association** in **1899** by **Sir Ebenezer Howard** in response to 19th century problems.

‘Town and country must be married’



Programme of the European Union

Europe

What makes a Garden City for today?



Find out more at
www.tcpa.org.uk

SPECIAL Project



Building the capacity of Town Planning Associations to plan and deliver sustainable energy solutions

Integrating spatial planning and energy planning





SPECIAL Key objectives



- To build the capacity of **Town Planning Associations** to integrate sustainable energy solutions into spatial planning training, practice, and delivery.
- To exchange experience and competences to deliver the integration of sustainable energy into spatial planning strategies at **local and regional** levels.
- To improve the energy-related competence of planners working within **local authorities** through piloting integrated spatial planning strategies for low carbon towns and regions.



Co-funded by the Intelligent Energy Europe Programme of the European Union



SPECIAL Partners



Town Planning Associations across Europe:

UK:	TCPA
Sweden:	Swedish Society for Town & Country Planning
Ireland:	Irish Planning Institute/South Dublin CC
Hungary:	Hungarian Urban Knowledge Centre
Italy:	National Centre for Town Planning Studies
Greece:	The Org. for the Master Plan and Environmental Protection of Greater Macedonia (ORTH)
Germany:	German Institute of Urban Affairs
Austria:	Provincial Govt of Styria, Dept Spatial Planning



Co-funded by the Intelligent Energy Europe Programme of the European Union



UK SPECIAL Multiplier Organisations – help to deliver training



1. **RTPI Learn** (Royal Town Planning Institute – online modules)
2. **PUSH** (Partnership for Urban South Hampshire)
3. **Sustainability East** (Climate change partnership in the East of England)
4. **CLASP** (Climate change partnership in North West England)
5. **Association for Public Service Excellence (APSE) Energy** - Local Authority Energy Collaboration
6. **Hertfordshire County Council - Building Futures** (Sustainable Design Toolkit and Awards, & Herts Design Review Panel)
7. **Department for Energy and Climate Change**
8. **TCPA groups** (Policy Council, Trustees, New Communities Group and Planning & Climate Change Coalition)



Co-funded by the Intelligent Energy Europe
Programme of the European Union



Portfolio of modular training materials



1. Challenges of climate change and sustainable energy supply
2. Framework of spatial planning and sustainable energy
3. Strategies, tools and instruments for integration of spatial planning and sustainable energy
4. Infrastructure and implementation at a local level
5. Stakeholder inclusion, participation processes and communications

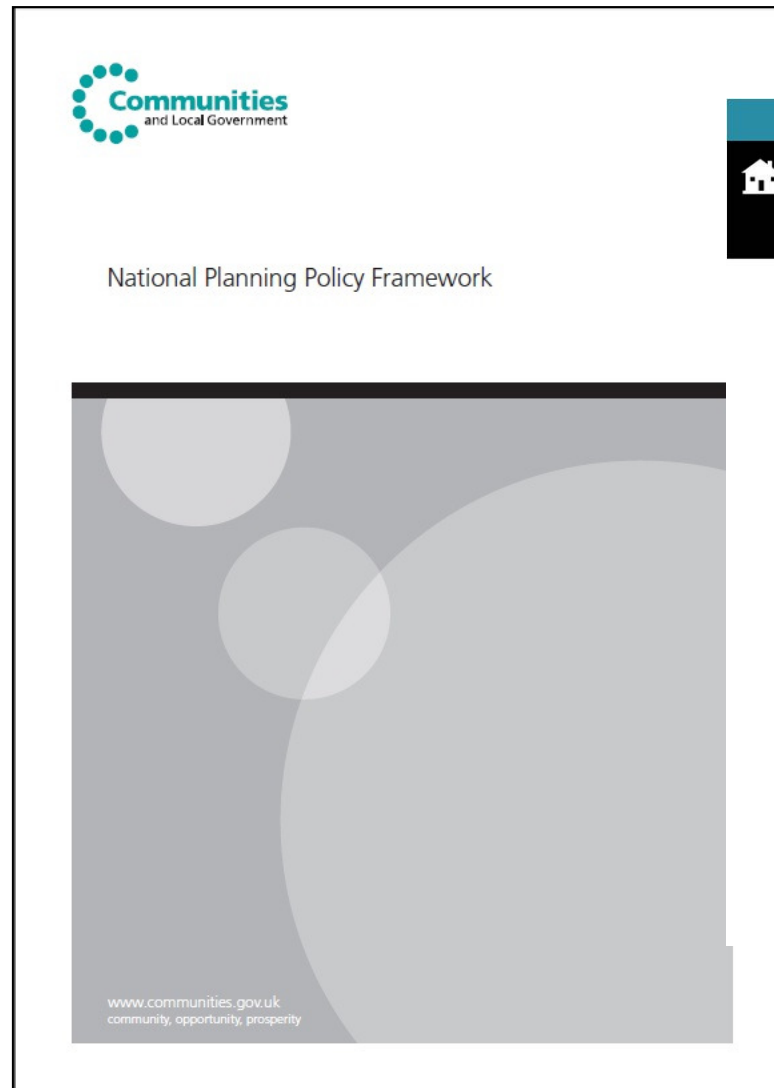


Co-funded by the Intelligent Energy Europe Programme of the European Union

Planning reform



New policy context for planning and energy in England



This site is currently in Beta. [Read more](#)

National Planning Practice Guidance

National Planning Policy Framework [Planning Practice Guidance](#)

Welcome to the home of the National Planning Policy Framework for England and supporting national planning practice guidance.

This site is currently in [Beta](#) for testing and comment. The draft planning practice guidance on this site has not yet been finalised. Existing guidance will not be cancelled until the new planning practice guidance is published in its final form.

We want to know what you think about how this site works and the draft guidance. Please give us your [feedback](#) during Beta, which lasts until 9 October 2013.

Search for

The National Planning Policy Framework

Planning Practice Guidance



Co-funded by the Intelligent Energy Europe Programme of the European Union

Integrating energy and spatial planning



1. Corporate energy strategy
2. Strong evidence base
3. Strong local plan policy



Co-funded by the Intelligent Energy Europe Programme of the European Union

Lessons from training weeks



England



Sweden



Germany



What makes delivery of sustainable energy successful?



Key Issues:

- Differences in planning structures and policy
- Differences in culture and politics
- Finance and funding
- Skills and resources
- Social justice





England: Strengths and weaknesses



Strengths

- Strong planning powers at the local level

Weaknesses

- Weak national policy on linking spatial planning and energy
- BIG SIX Oligarchy
- Uncertainty of investment
- Weaknesses in building standards
- Lack of skills
- Lack of political commitment





England: Examples

- Nine Elms and Battersea Power Station – energy opportunity mapping
- GLA District Heating Manual for London planners
- Thamesway Energy’s Central Milton Keynes district energy network
- Community wind – Gamlingay, South Cambridgeshire





Sweden: Strengths and weaknesses



Strengths

- Strong on policy at national level
- Positive behavioural change
- Local authority planning and energy departments working together
- Nuclear power

Weaknesses

- Not that strong planning structures
- Low on social justice
- Investment – privatisation of energy
- Shift from DHP to private control
- Nuclear power





Sweden: Example



- **Western Harbour, Malmö**

The comprehensive planning approach has created a new area of Malmö in the Western Harbour which relies on **100 % locally renewable energy**:

- Sun, wind and water
 - District heating linked to City DH system
 - Minimised energy consumption
-
- **Integrated spatial planning & energy planning**
 - Energy planning team integrated within the Planning Department of the municipality
 - Environment Department = driving force in the Western Harbour, working groups combining all departments in the planning of the development





Germany: Strengths and weaknesses

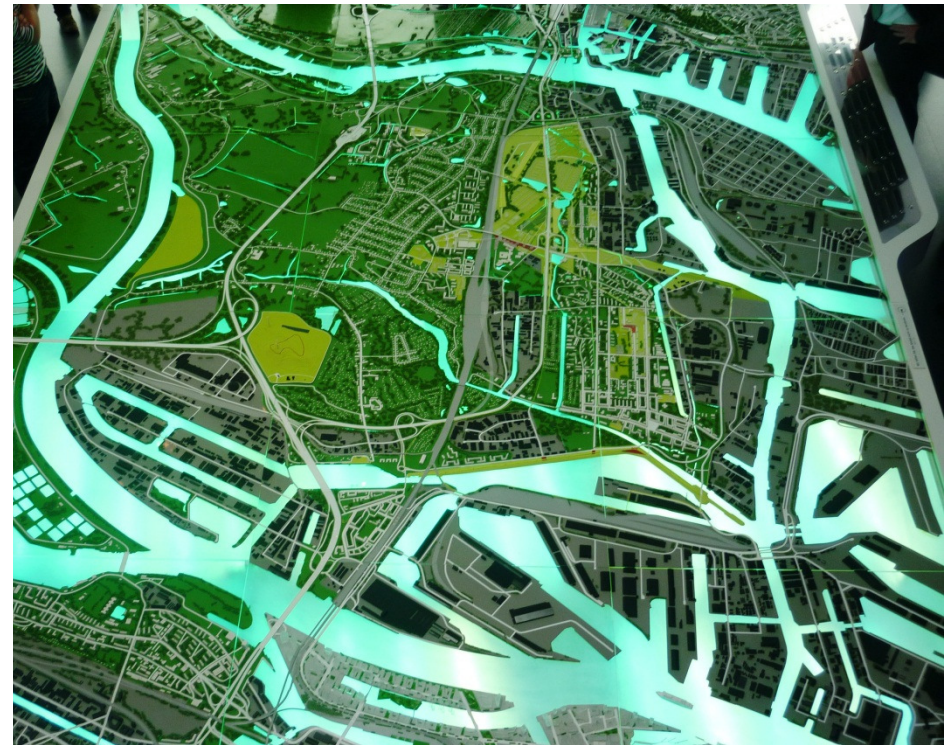


Strengths

- Strong political structures – Federal and local government
- Culture – open, honest, consensus on renewables
- Local authority ownership of energy generation AND supply
- Social justice and inclusive strategies
- Several funding streams at local and Federal level

Weaknesses

- Policy not stronger
- Spatial planning not stronger



Co-funded by the Intelligent Energy Europe Programme of the European Union



Germany: Examples

- **Hamburg – Energy hill and Energy Bunker**
 - The Energy Bunker and Energy Hill were excellent examples of how renewable energy had been positively planned for.
 - The lead role of the municipality in Germany allows for much more integrated approaches with spatial planning.
- **Re-Municipalisation**
 - Positive trend in Germany which helps to link spatial planning and energy planning.
 - Allows more control for municipalities.
 - Provides local economic benefits to the community.



Hamburg Energy Hill



From toxic waste dump to prime example of renewable energy generation




Images from IBA Hamburg and TCPA



Co-funded by the Intelligent Energy Europe Programme of the European Union

Landfill to Energieberg

 Power generation

 Heat generation

Supply to 2,000 homes
on the Elbe islands



- 01** Wind power: re-powering the existing wind turbine generators to produce electricity.
- 02** Solar power: photovoltaics installed on the slopes of the Energieberg.
- 03** Biomass: grass cuttings from the Energieberg turned into biogas.
- 04** Geothermal power: the energy in the groundwater and seepage water contributes to heating the information centre.
- 05** Landfill gas: methane gas – a waste fermentation product – is thermally used by Aurubis AG.

Wind power

Solar power

Biomass

Geothermal
power

Methane
gas



Hamburg Energy Bunker



Former air raid bunker converted to hot water storage from renewable forms of energy.

Supplies district with renewable heat, while feeding renewable power into the Hamburg distribution grid.




Hamburg Energy Bunker




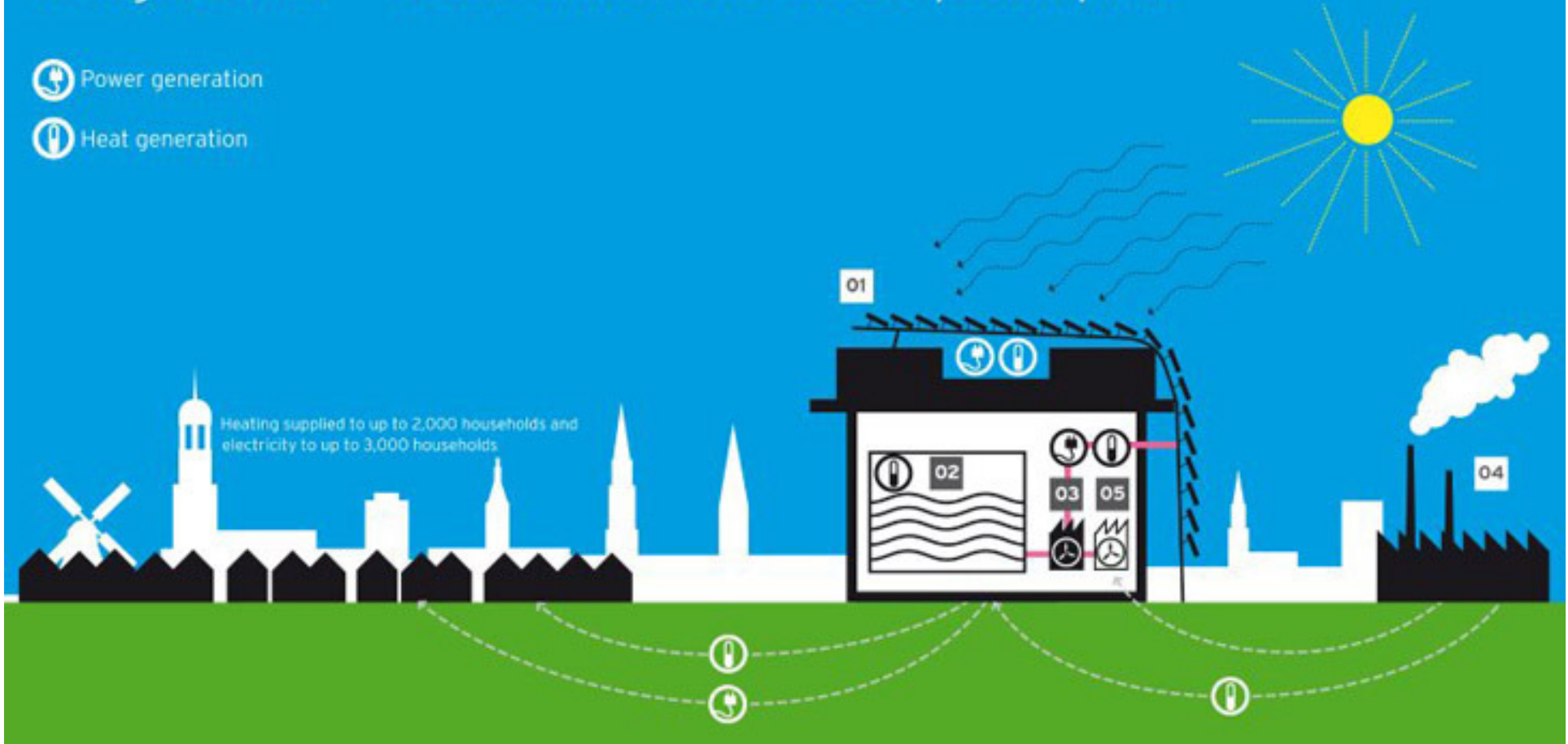
Hamburg voraus

INTERNATIONALE BAUAUSSTELLUNG HAMBURG

Energiebunker - transformation into an eco power plant

 Power generation

 Heat generation





SPECIAL
SPATIAL PLANNING and ENERGY for
COMMUNITIES IN ALL LANDSCAPES

The logo features a stylized line-art illustration of a landscape with a sun, a wind turbine, a house, and a city skyline.

Linking Spatial Planning & Energy Planning: How to make it happen in the UK



1. Strong **political leadership** and support
2. Effective and inclusive **cross-departmental working**
3. Effective and **integrated policy frameworks** at regional, city and masterplan scales
4. Effective and transparent **public-private partnerships** and **funding streams**



Co-funded by the Intelligent Energy Europe
Programme of the European Union

What SPECIAL can offer



- Resources
- Cross sector workshops
- Networking with other Multipliers
- Study visits (UK, Hamburg)
- Political awareness
- Case studies
- Assignments



Co-funded by the Intelligent Energy Europe
Programme of the European Union

We need your ideas!



What training / events on the integration of planning and energy would be useful for you?



Co-funded by the Intelligent Energy Europe Programme of the European Union